

### REMARKS

This responds to the Final Office Action mailed on June 30, 2008.

Claims 1, 13, 19, and 20 are amended, no claims are canceled, and no claims are added; as a result, claims 1-20 and 55-88 are pending in this application.

#### §103 Rejection of the Claims

Claims 1-3, 6-14, 16-20, 55-58, 60-68, and 70-88 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Publication No. 2004/0230681 to Strassner et al. (Strassner) in view of U.S. Patent Publication No. 2004/0039942 to Cooper et al. (Cooper).

Applicant respectfully submits that the Office Action did not make out a *prima facie* case of obviousness for at least the following reasons. Even if combined, the cited references fail to teach or suggest all of the claimed elements of Applicant's claimed embodiments. Further, the cited references teach away from the currently claimed embodiments.

In examining claims under 35 U.S.C. § 103(a), it is necessary for the Examiner to establish a proper *prima facie* case of obviousness before rejecting a claim as required by the Board of Patent Appeals and Interferences (BPAI). Such a rejection cannot be made if there is no evidence or suggestion in a cited reference of a claimed configuration. *Ex Parte Katoh et al.*, Appeal 20071460, Decided May 29, 2007. Further, it is improper to reject a claim when there is no suggestion to combine the teachings of the cited references, except from using the Applicants' invention as a template through hindsight reconstruction of the Applicants' claims. *Ex Parte Crawford et al.*, Appeal 20062429, Decided May 30, 2007. Moreover, a patent composed of several elements is not proved obvious merely by demonstrating that each element was, independently, known in the prior art *KSR Int'l v. Teleflex Inc.*, 127 S. Ct. 1727 (2007). See also M.P.E.P. § 2142. "[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." (See *In re Kahn*, 441 F. 3d 977, 988 (CA Fed. 2006) cited with approval in *KSR Int'l v. Teleflex Inc.*, 127 S. Ct. 1727, 1740-41 (2007)).

Moreover, the recent U.S. Supreme Court decision of *KSR v. Teleflex* provides a tripartite test to evaluate obviousness. "A rationale to support a conclusion that a claim would have been obvious is that *all the claimed elements were known* in the prior art and one skilled in the art

could have combined the elements as claimed by known methods *with no change in their respective functions*, and *the combination would have yielded nothing more than predictable results* to one of ordinary skill in the art.” (See *KSR International Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 82 U.S.P.Q.2d 1385 (2007)). Emphasis added.)

In the present case, Strassner describes an apparatus and a method for provisioning services that includes configuring one or more different devices. According to a specific embodiment, an apparatus for provisioning a service comprises an information model configured to represent a network resource of said network, to represent said service, and to represent the provisioning of said service, and a processor configured to use a subset of business rules and processes, which can be represented in the same information model, to constrain the implementation of said network resource. In accordance with another embodiment, an exemplary apparatus and method governs the manner in which a configuration of a network device is to be created, verified, approved, and deployed.

In the Final Office Action, it is argued on page 2 that Strassner discloses the mapping of level of abstraction and translating views in paragraph 0043. It is further argued that Strassner discloses mapping or translating configuration data for routing purposes (e.g., security information, connectivity, protocol information and the like) in paragraph 0042. These paragraphs of Strassner are set forth below.

[0042] The term "data model" can refer to any representation of the information model that defines how data is stored, manipulated and/or retrieved using a specific type of repository and access protocol. A data model, which can include data structures, operations, rules, and the like, is analogous to the implementation of the data defined in an information model, but in a particular repository that uses a particular access protocol and language to express its implementation. As an example, a router can be represented by a set of data models that represent physical and logical information that each describes one or more managed entities. In general, each data model can represent all or some of the information that describes a particular managed entity. For example, a router is typically associated with physical information (e.g., the set of line cards that are installed in the router) as well as logical information (e.g., protocols that are running on each of its interfaces). Other exemplary logical information can include protocol information, service information (e.g., connectivity using a VPN), statistical information (e.g., data describing how well a service is running), ownership information (e.g., who owns the device, who is responsible for changing the device), security information, and other like information.

[0043] "Translating," or "model mapping," as described herein, can refer to translating information from one type of model to another type of model (e.g., a first data model translated to a second data model). Model mapping changes the representation and/or level of abstraction used in one model to another representation and/or level of abstraction in another model. Model mapping can refer to a mapping from an information model to a data model. This type of mapping is usually exemplified through the mapping to a standards-based data model (i.e., a data model whose constructs are based on data structures and protocol elements defined in a known standard). Model mapping can also refer to a mapping between different data models that represent different "views," such as between a "business view" and a "device view." The concept of "views" is described further in connection with FIG. 3. By translating between different views, the administrative capabilities of a device can be abstracted into a common representation. In turn, this common representation is used to translate high-level business rules into low-level configuration commands for provisioning a service in accordance with the present invention. (Strassner, paragraphs 0042-0043).

As evident in these portions of Strassner cited in the Final Office Action, there is absolutely no disclosure or suggestion of anything related to a routing policy. There is a general mention of data modeling a router. There is a mention that a router can be associated with logical information. There is also mention that the logical information can include protocol information and service information (e.g., connectivity using a VPN). However, as understood by those of ordinary skill in the art, connectivity information is not the same as routing policy information. At best, connectivity information may convey a topology of network devices. But, no routing information can be inferred therefrom. As such, the Applicants submit that the Final Office Action is incorrect in its assertion that, "Strassner discloses mapping or translating configuration data for routing purposes."

As correctly noted in the Final Office Action, Strassner does not disclose the claimed policy repository to verify the intermediate layer against a set of verification rules for one or more client protocols including versions thereof (Final Office Action at pg. 3, para. 1). Moreover, Strassner does not disclose generating a configuration data abstraction layer of a routing policy, the configuration data abstraction layer to map a routing policy configuration to an intermediate layer comprising fields, operators and arguments. Strassner describes mapping from a system-oriented representation to four implementation-oriented representations interrelated by relationships (Strassner, para. 0059). Strassner performs these mappings to

provision a service using an information model configured to represent a network resource of a network. However, Strassner does not disclose or suggest the generation of a data abstraction layer of a routing policy as currently claimed. Further, Strassner does not disclose or suggest the mapping of a routing policy configuration to an intermediate layer comprising fields, operators and arguments. The various levels of abstraction described in Strassner and shown in Figure 3 of Strassner do not include a routing policy abstraction. Further, Strassner does not describe verifying the intermediate layer against a set of verification rules for one or more client protocols including versions thereof, or generating compiled policy transmission language for use by the one or more client protocols including versions thereof.

Cooper describes a method and apparatus for generating an initial policy specification file. A level of abstraction over a policy language is used, simplifying creating the file based on gross character characteristics of a network at the IP level, such as policy domains, communities of hosts, subnets, and firewalls. However, Cooper does not disclose generating a configuration data abstraction layer of a routing policy, the configuration data abstraction layer to map a routing policy configuration to an intermediate layer comprising fields, operators and arguments. The abstractions described in Cooper do not include a routing policy abstraction as currently claimed.

Cooper describes a system that takes as input a policy file that has been generated using a policy generator wizard or other means, and a file containing network packet dump data that has been collected from an observed network by a packet capture, or that has been processed by a protocol monitor processor (Cooper, para. 0089). Cooper also describes a policy monitoring component 100 that includes a database 104 for storing synthesized information of the packet dump's 115 conformance to the specified policy performed by the policy engine 102 (Cooper, para. 0090). Thus, Cooper describes a system that compares network packet dump data with a specified policy to determine conformance. However, Cooper does not disclose or suggest verifying an intermediate layer against a set of verification rules for one or more client protocols including versions thereof, or generating compiled policy transmission language for use by the one or more client protocols including versions thereof. In other words, Cooper is checking observed network dump data against a specified policy. Cooper is not verifying an intermediate

layer against a set of verification rules for one or more client protocols that is not based on observed network data.

Claims 1-20 include the elements distinguished above with respect to Strassner and Cooper. Specifically, these non-obvious elements are recited in independent claims 1, 13, 19, and 20 as amended herein. With respect to Claims 55-88, Strassner and Cooper do not teach or suggest the combination of elements recited therein. In particular, Strassner and Cooper do not teach or suggest generating libraries for attach points associated with one or more versions of one or more client protocols. As argued above, Strassner is related to provisioning services and not related to generating libraries for attach points associated with one or more versions of one or more client protocols. Similarly, as argued above, Cooper does not check statements of a routing policy against the capabilities of one or more of the attach points. Cooper checks observed network dump data against a specified policy. It would not have been obvious to one of ordinary skill in the art to combine these references in the manner suggested in the Office Action. Claims 55-88 include one or more of these non-obvious elements distinguished herein with respect to Strassner and Cooper. Specifically, these non-obvious elements are recited in independent claims 55, 65, 73, 74, 75, 81, 87, and 88 as presented herein.

Thus, Strassner or Cooper, alone or in combination, do not render obvious claims 1-20 and 55-88 as currently presented.

Therefore, for the reasons set forth above, Applicants respectfully request withdrawal of the §103 rejections and respectfully request allowance of the pending claims.

**CONCLUSION**


Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at 408-406-4855 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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**CERTIFICATE UNDER 37 CFR 1.8:** The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop RCE, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 29<sup>th</sup> day of October 2008.

/ Jonathan Ferguson /  
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